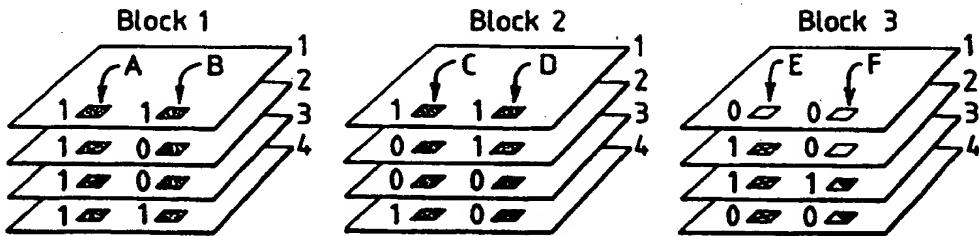




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04N 7/30	A1	(11) International Publication Number: WO 98/37700 (43) International Publication Date: 27 August 1998 (27.08.98)
(21) International Application Number: PCT/GB98/00360 (22) International Filing Date: 5 February 1998 (05.02.98)		(81) Designated States: CA, JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
(30) Priority Data: 9703441.7 19 February 1997 (19.02.97) GB		Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
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(54) Title: PROGRESSIVE BLOCK-BASED CODING FOR IMAGE COMPRESSION



(57) Abstract

A method of image compression includes significance switching of DCT coefficients in block-based embedded DCT procedures. Bitwise digitized DCT coefficients are passed through successive significance sweeps of the whole image from the most significant down to the least significant coefficient bit planes. With each new sweep, newly significant coefficients may appear within a block, and block-masking is used to transmit the addresses of those newly significant coefficients. An off-mask may also be used. The invention further relates to a hardware or software-based image encoder.